



# Vermont Wetlands: Status, Trends, and Actions

Laura Lapierre,  
Wetlands Program Manager  
May 26, 2022



# Where Land and Water Meet







# Wetland Function and Values

Historically Vermont has lost  
35% of wetland area.  
~4% is wetland today.

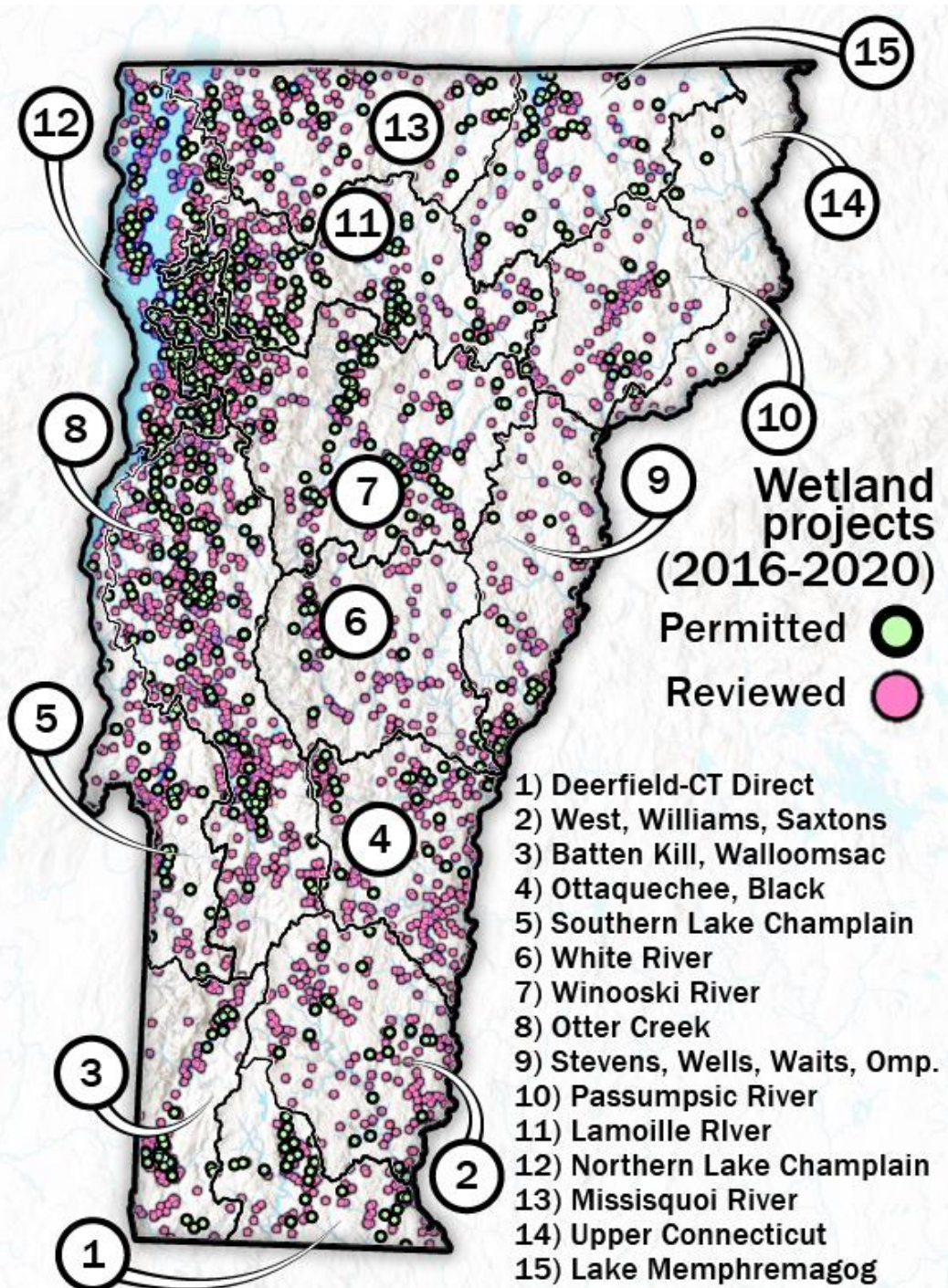


# Vermont Wetlands Program

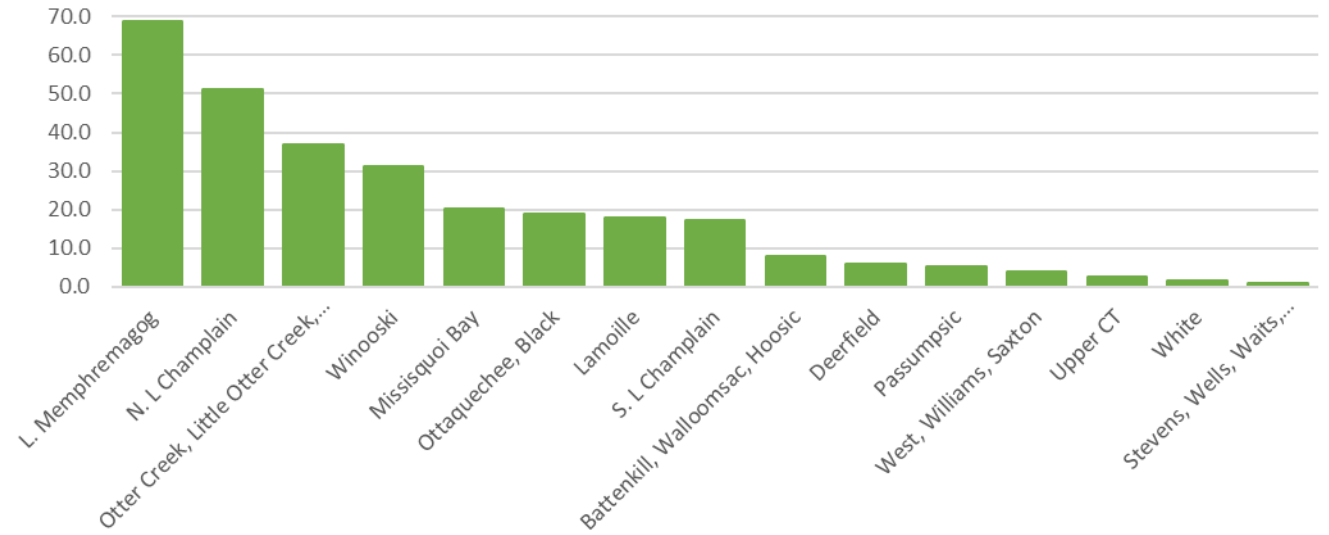
- Identify wetland locations with maps and site visits
- Assess the health of wetlands
- Support voluntary wetland restoration
- Implement Vermont Wetland Rules
  - Review project plans
  - Require wetland avoidance where possible
  - Ensure no net loss of wetland function or value



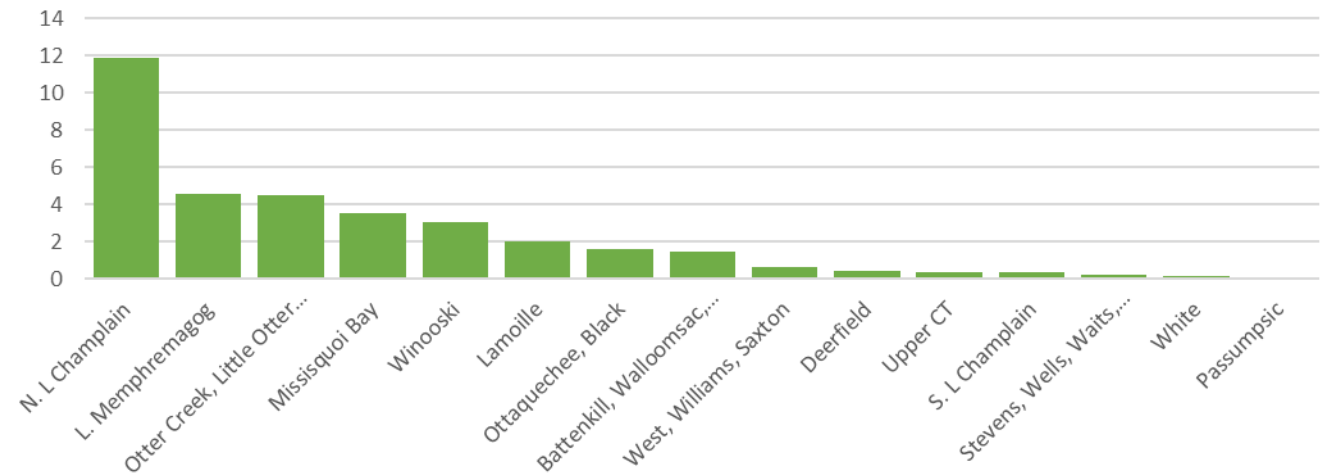




Permitted Wetland and Buffer Impacts by Basin (2016-2020)

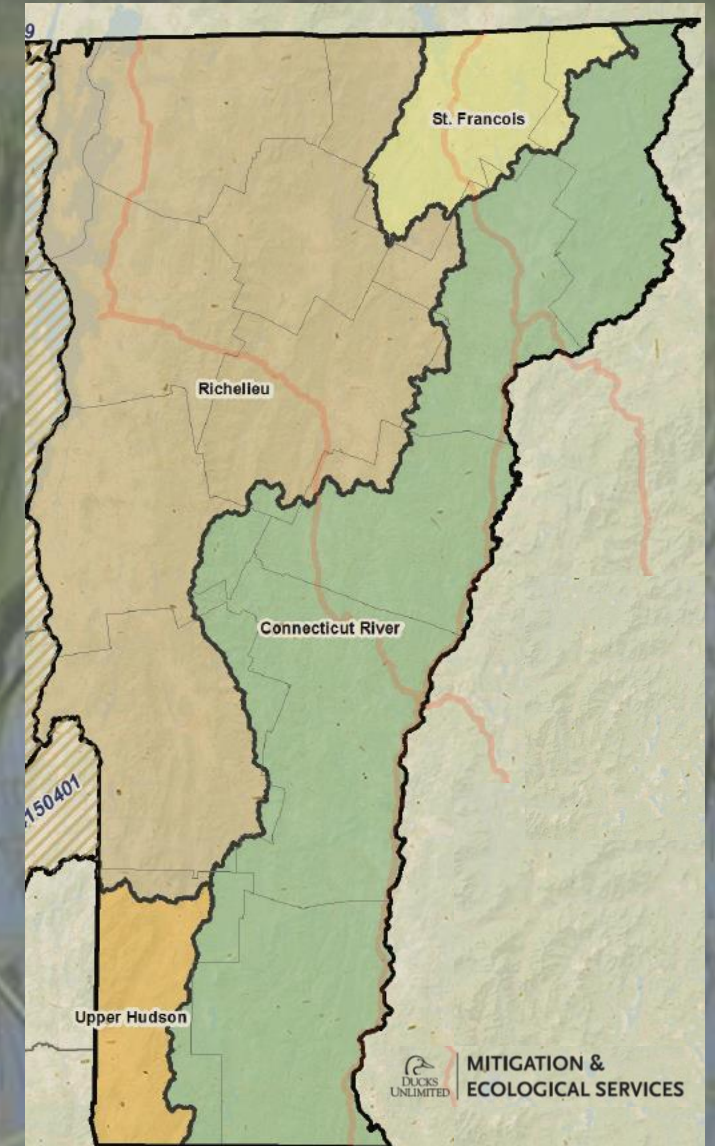
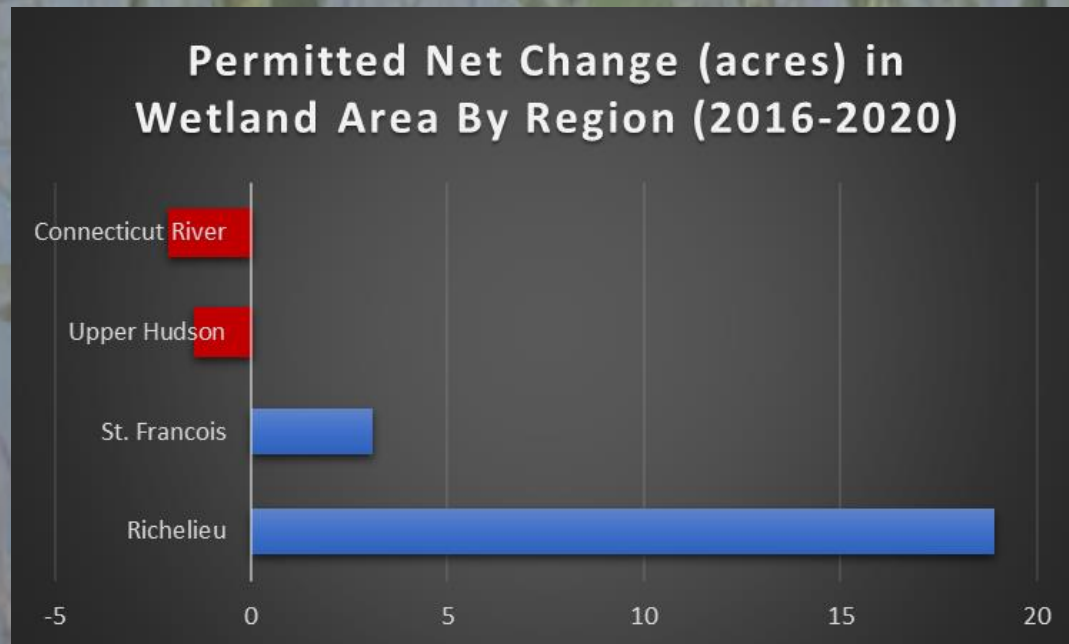


Permitted Wetland Loss by Basin (2016-2020)





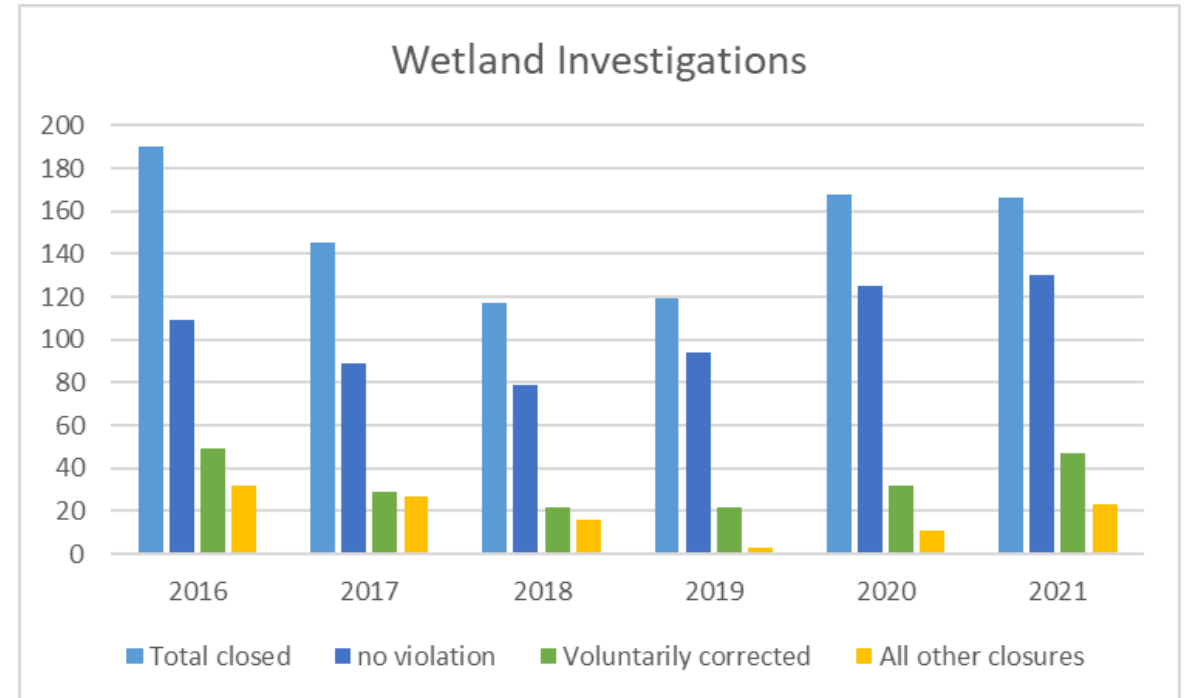
# Permitted Net Gain of 18.5 Wetland Acres 2016-2020



# Wetland Investigations 2016-2021

Average of 180 new investigations started each year.

See Legislative Reports: “Report to the Legislature Uniform Environmental Enforcement Act” 2016-2021





# Wetland Losses and Gains 2021

Permit issuance increased by over a third from previous years.

CY 2021:

2 acres of wetland  
filled

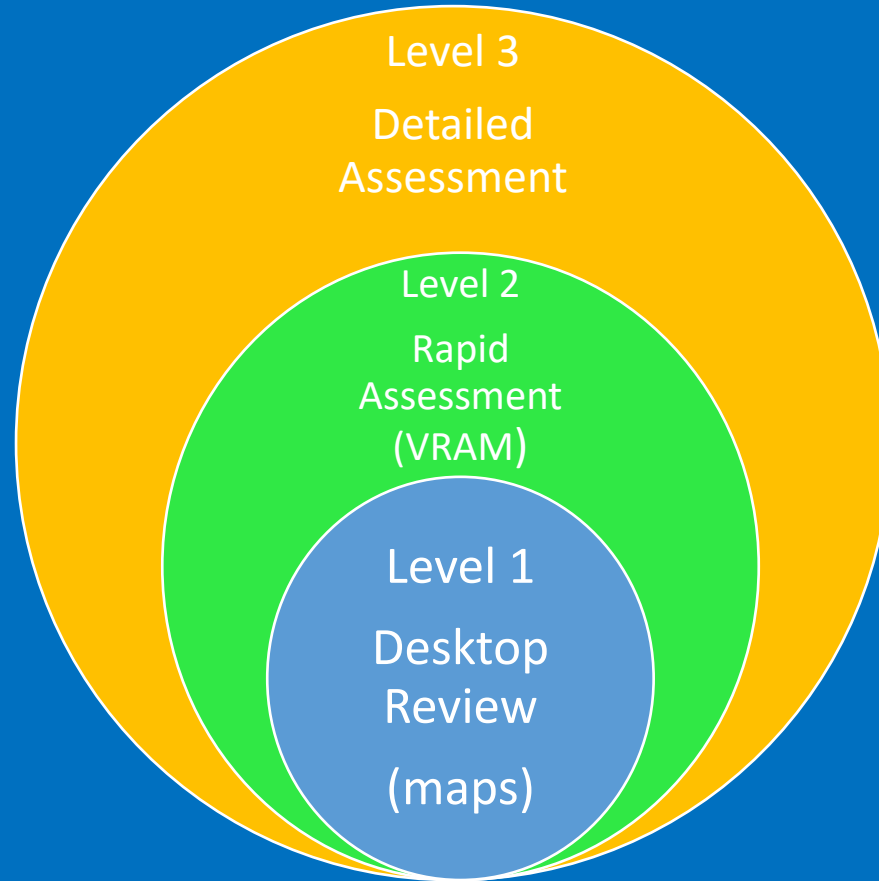
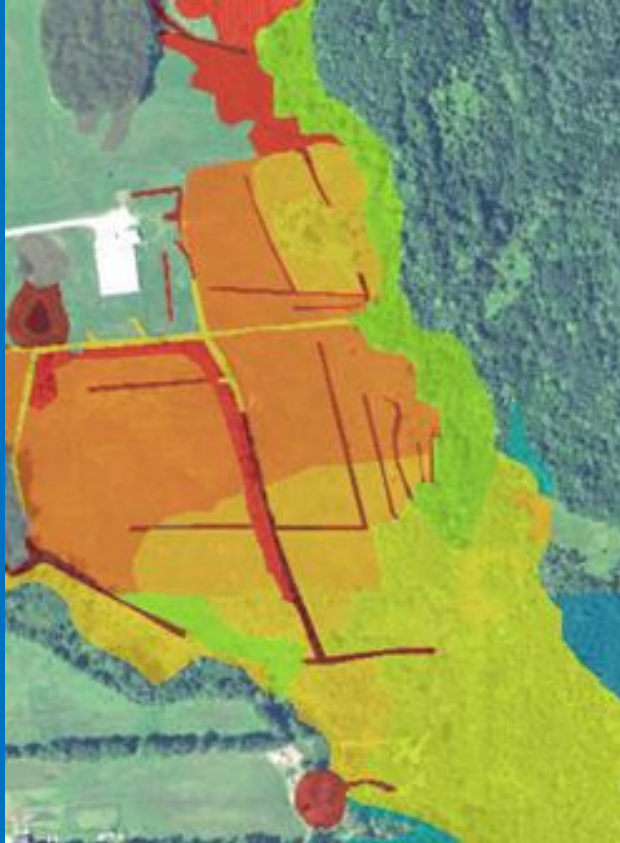
11 acres of wetland  
enhanced or restored

**Table 1: Loss and Gain By County**  
*(units in square feet)*

County	Loss	Gain
Addison	1600	6000
Bennington	200	200
Caledonia	1576	22400
Chittenden	38680	304098
Essex	2662	3600
Franklin	4447	0
Grand Isle	2524	67974
Lamoille	6051	53787
Orange	364	0
Orleans	3598	0
Rutland	16945	0
Washington	1095	200
Windham	26	23562
Windsor	5400	0



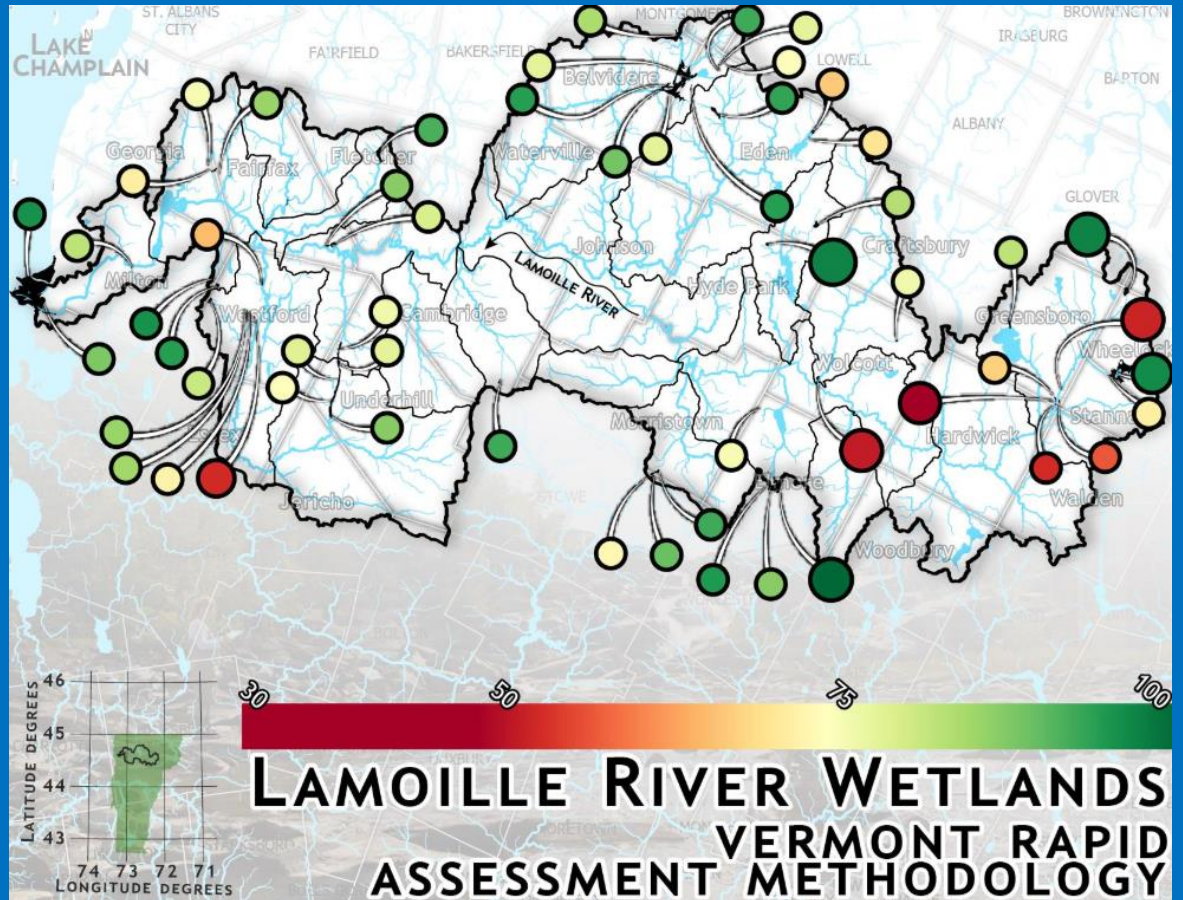
# Wetlands Biomonitoring





# Vermont Rapid Assessment Method

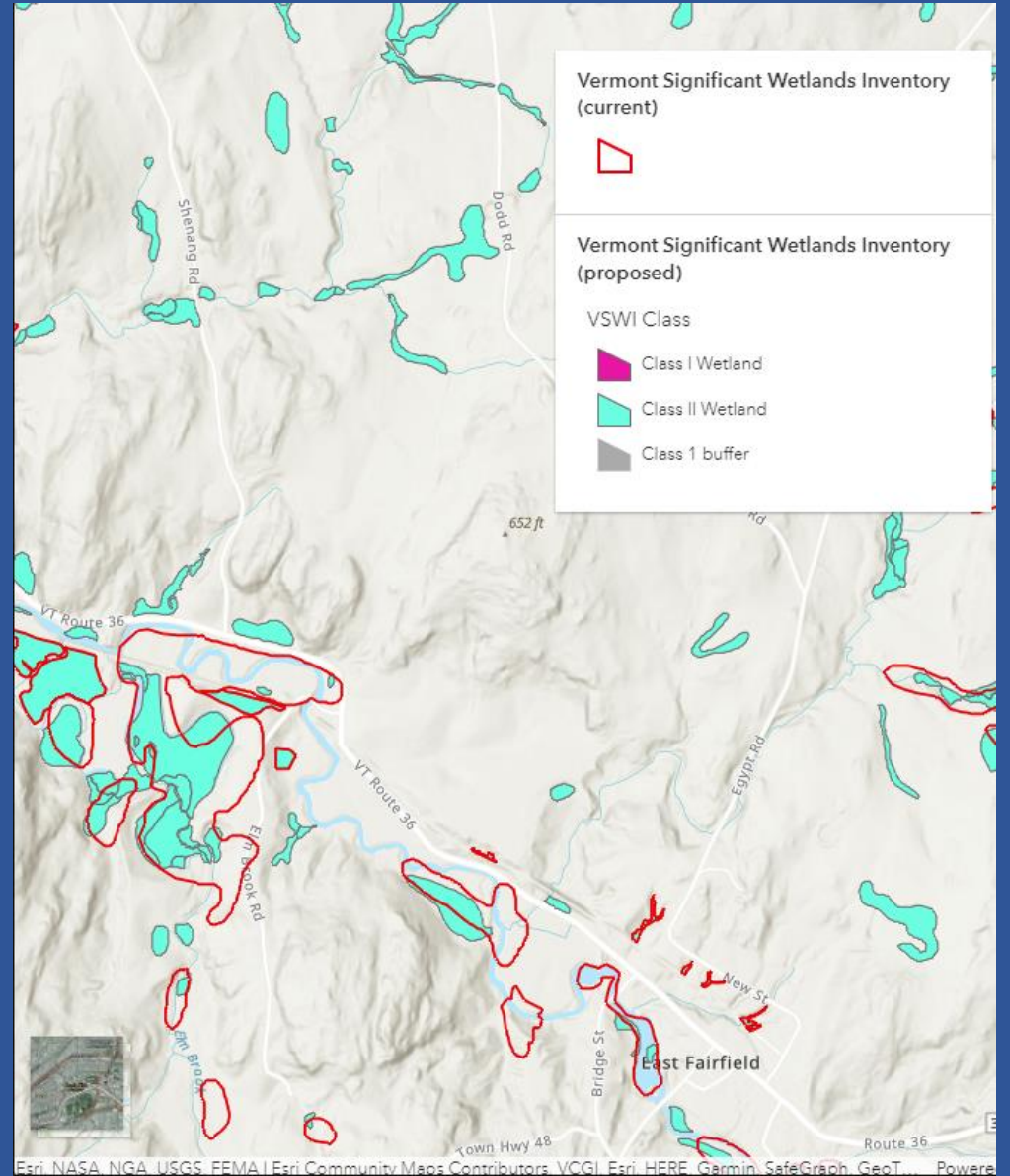
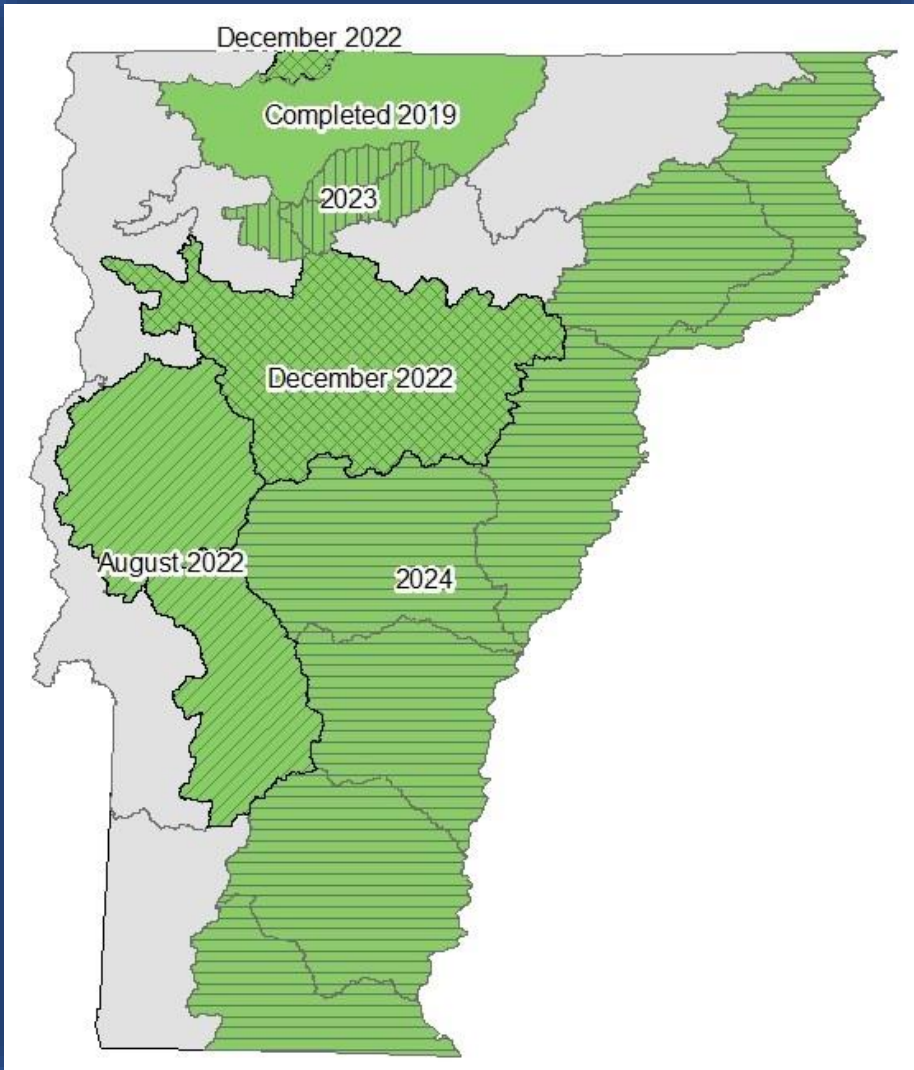
1. Wetland Area
2. Upland Buffers and Surrounding Land Use
3. Hydrology
4. Habitat Alteration and Development
5. Vermont's Natural Heritage
6. Habitat Structure and Microtopography



VRAM: function + value + condition = overall wetland quality



# Wetland Map Updates Underway



See Wetland Rulemaking Website for More.



# How Can You Help?

Vermont Vernal Pool Monitoring Project | Vermont Center for Ecostudies  
([vtecostudies.org](http://vtecostudies.org))





# iNaturalist



CALIFORNIA  
ACADEMY OF  
SCIENCES



NATIONAL  
GEOGRAPHIC

## Stats

### Totals

1923

Observations »

443

Species »

18

People »

### Most Observations



charlie

1659 observations



susanelliott

176 observations



jcorven

42 observations



laura\_vt

11 observations



lhatm0ej

7 observations

### Most Species



charlie

386 species



jcorven

27 species



susanelliott

22 species



laura\_vt

9 species



lhatm0ej

7 species

### Most Observed Species



*Castor canadensis*

63 observations



*Pinus strobus*

54 observations



*Typha latifolia*

51 observations



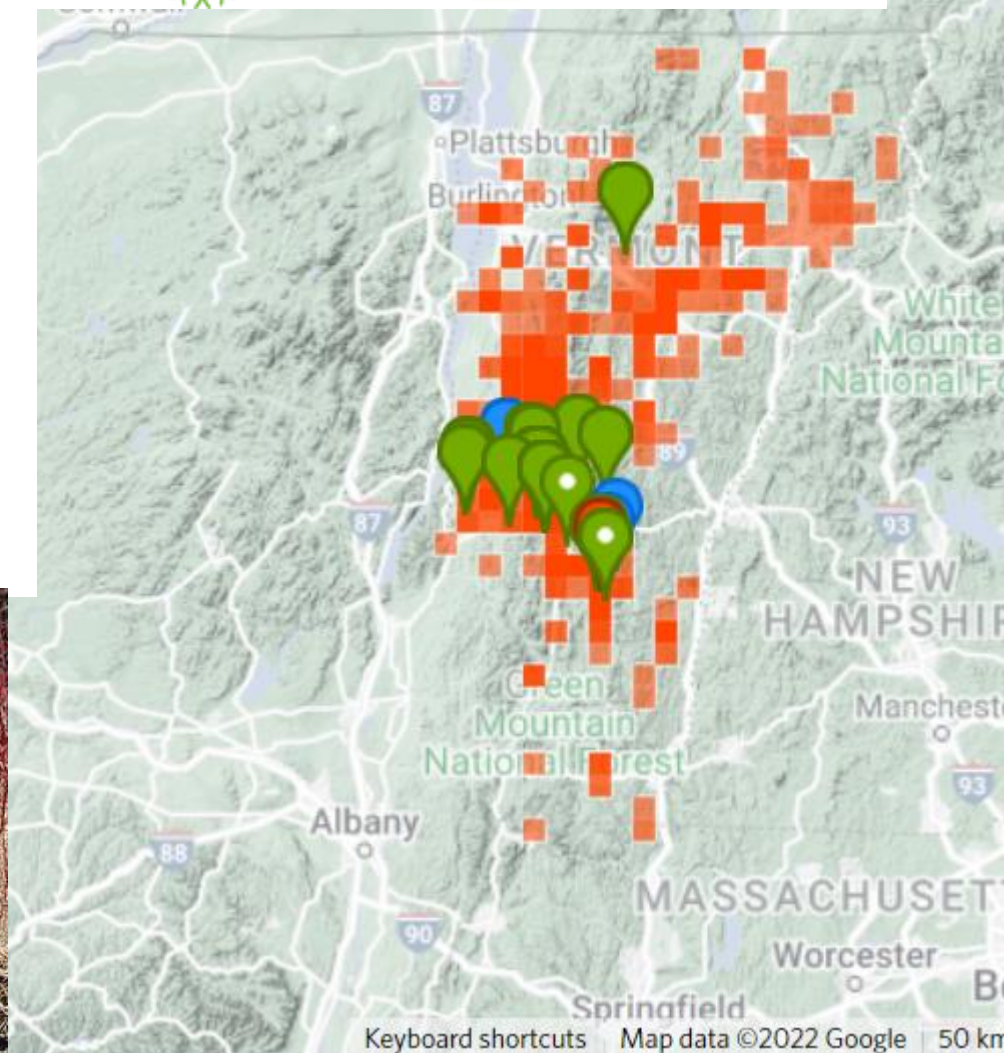
*Onoclea sensibilis*

46 observations



*Abies balsamea*

43 observations





# Help Your Community Find Wetlands

## Wetland Screening Tool:

<https://anrmaps.vermont.gov/websites/wetlandScreening/>

## Wetland Inventory Maps: <http://tiny.cc/wetlands>

## Landowners Guide To Wetlands:

<https://dec.vermont.gov/watershed/wetlands/what/guide>

## Hire a Wetland Consultant:

<https://dec.vermont.gov/watershed/wetlands/what/id/wetland-consultant-list>

## Program Inquiry Form:

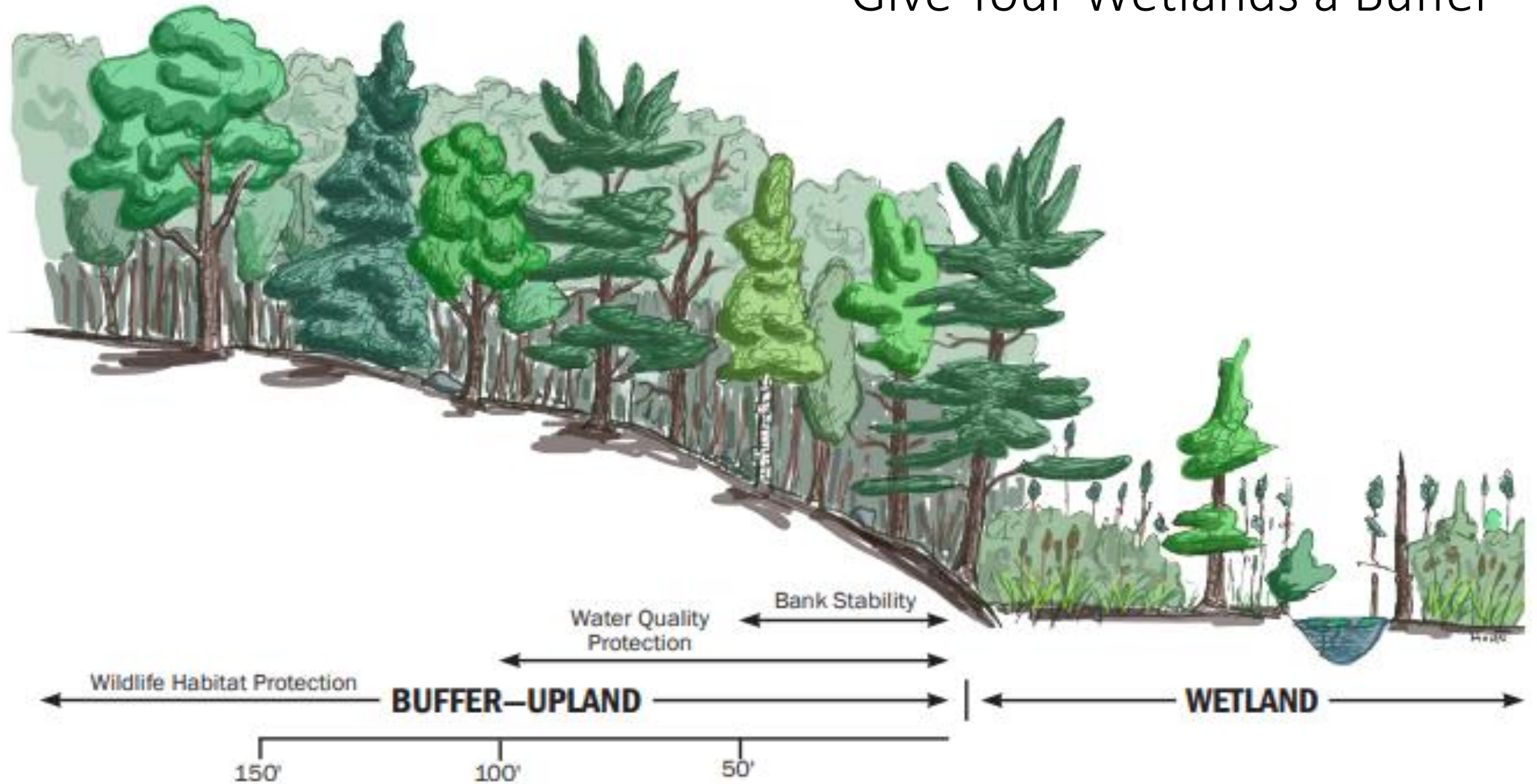
<https://dec.vermont.gov/watershed/wetlands/contact>

## You Tube Channel:

<https://www.youtube.com/watch?v=oDzL6NRIGgs&list=PLLVJCF6Lbmxkg4ZPOiAg2YybklslkMQ>



# Give Your Wetlands a Buffer





# Wetland Restoration



The Wetland Restoration Potential Layer (2017) is found in the Wetland Inventory Map under "Wetland Map", "Watershed Protection".



Learn more:

<https://dec.vermont.gov/watershed/wetlands/protect/restore>





# Class I Petitions



Photo credit: Valley News



A wide-angle landscape photograph. In the foreground, a calm body of water reflects the sky and surrounding vegetation. Patches of green and brown marsh grasses emerge from the water. The middle ground features a dense forest of evergreen and deciduous trees. In the background, a range of rolling mountains is visible under a clear blue sky with a few wispy clouds. The text "Enjoy with Friends and Family" is centered over the middle of the image in a white, sans-serif font.

Enjoy with Friends and Family